

Hamilton Section



Project newsletter Issue 05 | May 2017



Each 31m beam is transported from Tauranga by road using a truck and a specialised vehicle called a jinker.



The jinker steers the rear of the beam with its motor turned off, then drives back to base to be loaded with the next beam

First beams lifted onto Gordonton Road Bridge

A large crane lifted the first bridge beams into place on the Hamilton Section project this month.

The 16 beams placed on the Gordonton Road Bridge are each 31 metres long and weigh 50 tonnes. They are called 'Super T' beams because they are T-shaped when viewed from one end.

The beams are placed on bearings at each end to allow the bridge to move during an earthquake. All the bridges along the Hamilton Section project are designed to survive a strong 1-in-2500-year quake.

The concrete bridge deck will now be poured on top of the beams, and barriers installed. The bridge approaches will be completed and bitumen laid for traffic.

Each bridge beam was manufactured in Tauranga then transported to site using a specialised truck and jinker (see photo). The truck supports and steers the front of the beam while the jinker supports and steers from the rear. Dual steering is needed to safely steer the 31m-long beam around corners.

Once the beam arrives on site, it is lifted off by crane. The truck and jinker then return separately to Auckland for the next beam. The jinker has its own motor, but this is only used to return the vehicle to its base in Auckland. The motor is turned off while transporting beams.

The Gordonton Road Bridge will be the first bridge completed on the Hamilton Section. It is expected to open to traffic in August this year. In October, the expressway route will be excavated beneath the bridge.



Jeremy with his 1952 Plymouth

Our people

Your name? Jeremy Williamson

Your role? I'm the bridge section engineer at the Gordonton Road Bridge.

What's special about this bridge? It's the first bridge on the project to get beams.

What other projects have you worked on?

In New Zealand: The Waikato Expressway Te Rapa Section, Christchurch Southern Motorway, Taupo Bypass.

In London: The Olympic Park and Stadium (after the 2012 games) and the Stockley Rail Bridge - a 19 span viaduct in West London.

What do you do when you're not at work?

I enjoy building and driving old cars, I own a 1952 Plymouth Cranbrook. Every year my Dad organises a day at St Joan's Hospital in Hamilton where we have lunch with the residents and then take them for a drive around Hamilton. We usually get 20 cars and it's a great day out for everyone.



Climbing trees to protect our bats

Pages 2



Open Day draws more than 1200 visitors

Page 4

Climbing trees to protect our bats

Our staff are going to great lengths – and heights – to protect our native longtail bats.

Before we started building the Hamilton Section of the Waikato Expressway, we employed ecologists to find out more about longtail bats around Hamilton – where they live, what size and types of tree they typically roost in, and so on.

We've hung bat monitors in trees across the 22km length of our project, which proved that bats are more widely distributed around Hamilton than anyone realised.

Our research identified bat colonies no one knew about before, and has added considerably to the bat knowledge base.

We recognise that bats are at risk every time we cut down a tree to build a bridge or an

embankment, so we check every potential roosting tree for bats before we fell it. In the gullies, we send arborists up the trees to visually check all potential roost sites – any holes or cavities behind the bark. If that's not possible, our environmental staff spend two mornings and evenings using bat monitors and visual inspections to check for bat movements.

Bats are shy creatures and they are always changing their roost sites, so it's not surprising that while our staff have encountered flying bats in the gullies, we haven't found any roosting bats so far. If we do, we'll work through an agreed process with the Department of Conservation and Waikato Regional Council.

So the bottom line is that bats are protected when we remove trees to build our bridges. And longer term, we're planning to improve their habitat. We will also restore 20 hectares of gully habitat and plant 650,000 new plants along the project – mainly locally sourced native species.



Our arborist fills a potential bat roost to ensure no bats are roosting in the tree when it is felled



On his way up – our arborist climbs a large tree to inspect for bats.

Working at multiple sites is a challenge

A tour of the Hamilton Section project can potentially take up to three hours. That's because we don't have just one site - we currently have 15 sites.

This includes eight bridge sites and seven earthworks sites. Intersecting those sites are 11 local roads, one state highway and a main trunk railway line. Most of those sites are not connected, so we can't haul material between them unless we transport it by road.

Managing a 22km-long project with so many unconnected sites is a challenge. That's why we're building key bridges early – to allow our dumptrucks and motor

scrapers to move sand and dirt from one site to the next – going under or over local roads and the rail line.

By our next summer earthworks season – starting in October 2017 – the bridges at Osborne Road, Gordonton Road, Morrinsville Road and Matangi Road will be finished, and we'll dig out beneath them to provide access from one site to the next. By December, we'll have completed the bridge over the rail line at Ruakura and the East-West Link Bridge over SH1 at Tamahere, connecting more sites and making it easier to move sand and dirt to where it's needed.



Bulldozers and zv form the expressway embankments near Osborne Road

Project construction in 2017



Hamilton Section

Waikato Expressway

Construction in 2017

- - - - - HCC/WDC boundary
- - - - - Expressway route
- Traffic signals operating
- Bridge construction site

Open Day draws more than 1200 visitors

Our Project Open Day attracted more than 1200 visitors on 1 April, and we're already planning bigger and better things for next year's event.

Top attractions for families were the big sandpit where kids could win rewards for finding archaeological treasures, and pulling the levers on the little digger.

Popular with the adults were the walking tours to the Ruakura Rail Bridge, the Visitor Centre and the dumptrucks, diggers and dozers on display.

The day turned out hot and dry – and solid underfoot in our paddock carpark.

Thanks to everyone who turned up on the day. If you didn't make it this year, we look forward to seeing you at our Open Day in 2018.



Packing them in at the Visitor Centre



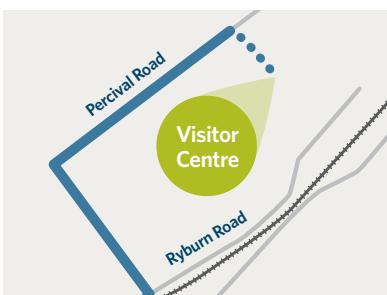
Another walking tour heads off to the Ruakura Rail Bridge construction site



The big machines attracted plenty of interest



Flags mark the way to the Open Day



Visitor Centre opens on Saturdays

We're opening our Visitor Centre at 164 Percival Road for three hours on the first Saturday of each month, from 9.00am-12.00pm. We will continue to open on Saturday each month while we have sufficient visitor numbers.

Our next Saturday opening is on Saturday 3 June.



Any questions?



Follow us on facebook www.facebook.com/waikatoexpressway



Phone us on
0800 322 044



Visit our website
www.nzta.govt.nz/hamilton

The Communications Team

Hamilton Section Project
NZ Transport Agency
Telephone: 0800 322 044